EVMS Desktop Reference

Cost

$360M

Cost Overrun

$300M

EAC
(Forecast)

BAC
(Total Budget)

PV (Planned)

Spending
Variance

Schedule
Variance

AC
(Actual)

Cost
Variance

CPI

Schedule
Slippage

EV
(Accomplishment)
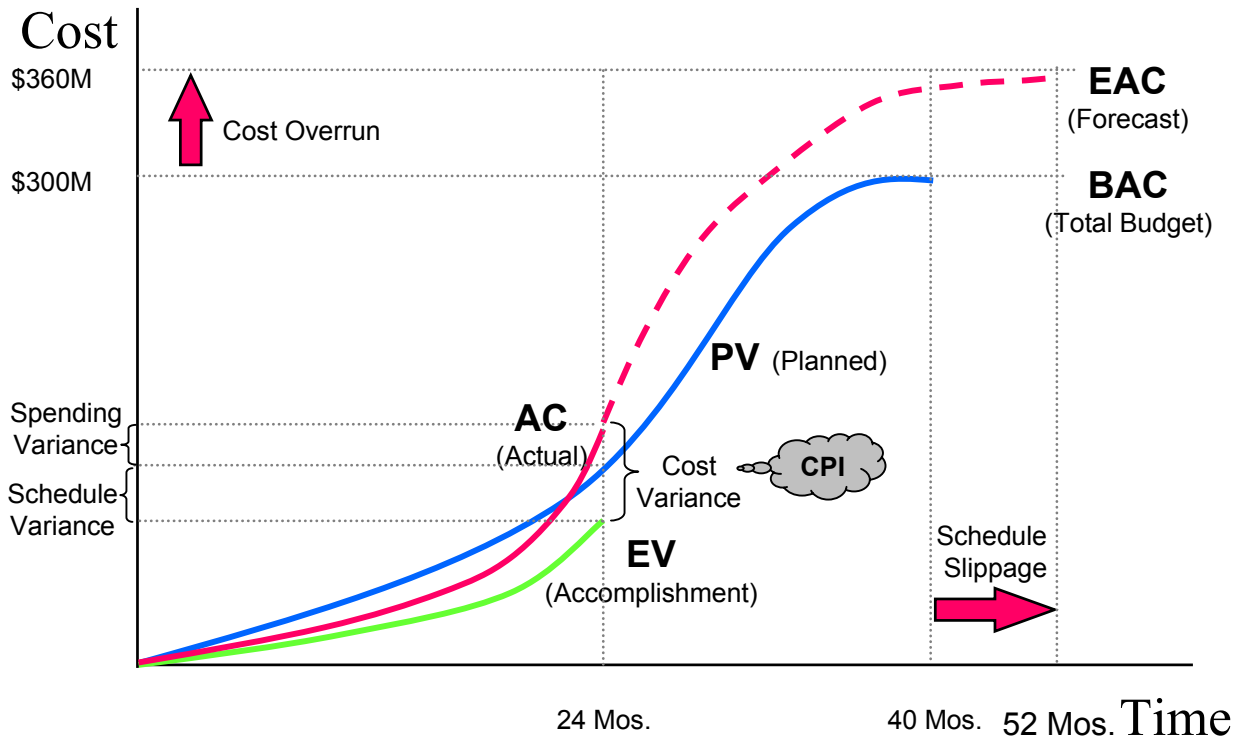
24 Mos.   40 Mos. 52 Mos. **Time**

PV   PLANNED VALUE
EV   EARNED VALUE
AC   ACTUAL COST
BAC   BUDGET AT COMPLETION
EAC   ESTIMATE AT COMPLETION
ETC   ESTIMATE TO COMPLETE
CV   COST VARIANCE
SV   SCHEDULE VARIANCE
CPI   COST PERFORMANCE INDEX
SPI   SCHEDULE PERFORMANCE INDEX

Variances

Schedule Variance (SV) = EV - PV

Cost Variance (CV) = EV - AC

Cost Variance (%) = $\dfrac{CV}{EV}$ x 100

Schedule Variance (%) = $\dfrac{SV}{PV}$ x 100

Variance at Completion = BAC - EAC

Performance Indices

Schedule Performance Index (SPI) = EV/PV

Cost Performance Index (CPI) = EV/AC

Others

Estimate at Completion (EAC) = $\dfrac{BAC}{CPI}$

Estimate at Completion = AC + ETC

PV, EV and AC
COMPARISONS

Planned Value (PV)	Earned Value (EV)	Actual Cost (AC)	Calculation		Conditions
$100	$100	$100	CV = 0	On Cost	
			SV = 0	On Schedule	
$200	$200	$100	CV = 100	Underrun Cost	
			SV = 0	On Schedule	
$100	$100	$200	CV = -100	Overrun Cost	
			SV = 0	On schedule	
$100	$200	$200	CV = 0	On Cost	
			SV = 100	Ahead of Schedule	
$100	$200	$100	CV = 100	Underrun Cost	
			SV = 100	Ahead of Schedule	
$100	$200	$300	CV = -100	Overrun Cost	
			SV = 100	Ahead of Schedule	
$200	$100	$100	CV = 0	On Cost	
			SV = -100	Behind Schedule	
$300	$200	$100	CV = 100	Underrun Cost	
			SV = -100	Behind Schedule	
$200	$100	$300	CV = -200	Overrun Cost	
			SV = -100	Behind Schedule	